July 22, 2005

Mr. Mike Gallagher, PBT Coordinator
Department of Ecology
P.O. Box 47600
WA, 98504
mgal461@ecy.wa.gov

Re: Draft PBT Rule (Chapter 173-333 WAC)

Dear Mr. Gallagher:

The North American Metals Council ("NAMC") appreciates the opportunity to provide comments on the Washington Department of Ecology's ("Ecology") draft rule entitled "Persistent Bioaccumulative Toxins" ("Draft PBT Rule"), which would be codified as Chapter 173-333 WAC. NAMC is an unincorporated not-for-profit group of metals-producing and metals-using associations and companies that focuses on science and policy matters that affect metals in a generic way. NAMC has played an active role for several years in discussions at the U.S. Environmental Protection Agency and elsewhere regarding the scientific validity of application to metals of criteria based on persistence, bioaccumulation, and toxicity ("PBT"). Ecology's draft PBT rule directly raises this issue. For the reasons explained below, NAMC urges Ecology to reject the current draft's attempt to extend the use of PBT criteria to the hazard assessment of metals.

The Draft PBT Rule would identify a metal as a PBT chemical if it is found to meet general PBT criteria and if "ecology determines that [the metal] is likely to be present in forms that are bioavailable." Draft PBT Rule, Section 173-333-320 (2)(d). Indeed, two metals, cadmium and lead, are included in the PBT list in Section 173-333-310 (2) of the Draft Rule, with a parenthetical notation indicating that the metal has been listed "pending review of bioavailability." While it is not entirely clear, we presume this means that the two metals will remain on the list if Ecology determines they are "likely to be present in forms that are bioavailable." Exactly how Ecology would make that determination is not explained, and the term "bioavailability" is not defined, so one can only guess at how the Draft Rule would actually be applied to metals. That is a serious concern. In any event, the mere fact that a metal is likely to be present to some extent in a "bioavailable" form does not mean that the application of Ecology's general PBT criteria to assess its hazard is appropriate as a matter of science or policy.

However, we have an even more pressing concern -- viz., that the treatment of metals in the Draft PBT Rule is contrary to a commitment Ecology made in 2002, after being advised that U.S. EPA was conducting a comprehensive scientific review of the question whether PBT criteria can appropriately be applied to metals.

As Ecology stated in a letter dated March 5, 2002:

> Ecology has learned that EPA will be working with its Science Advisory Board to develop comprehensive cross-agency guidance for assessing the hazards and risks of metals. Until this issue posed to EPA's Science Advisory Board is addressed, Ecology will include a footnote on any PBT Working List identifying that any metals on the working list are currently undergoing this review and that Ecology will revise any PBT working list so as to be consistent with EPA waste minimization treatment of metals.[1]

EPA's current waste minimization program identifies two sets of "priority chemicals": 27 organic chemical substances that were selected using PBT characteristics, and three metals which are separately listed.[2] EPA explicitly states that it did *not* list the three metals on the basis of PBT criteria:

> In its 1998 Notice, EPA identified these metals as Priority Chemicals using the same PBT analysis framework that it used for organic chemicals. EPA subsequently decided to defer the use of that framework and is working with its Science Advisory Board to develop a consistent, Agency-wide approach for the evaluation of metals.[3]

Accordingly, if Ecology is to fulfill its commitment to "revise any PBT working list so as to be consistent with EPA waste minimization treatment of metals," the Ecology Draft PBT rule may not list metals through use of PBT criteria.

EPA's Science Advisory Board ("SAB") review of the draft Metals Risk Assessment Framework is still ongoing. See http://www.epa.gov/sab/panels/mraf_rev_panel.htm. However, all indications are that the outcome will not support the use of PBT criteria to evaluate the hazard and risk of metals. For example, in its October 23, 2002 Review of the EPA Metals Action Plan, a key step in the process under which the draft Metals Risk Assessment Framework is being developed, the SAB acknowledged that "[t]he Panel believes that persistence is a problematic scientific issue for assessing metals hazards and risks."[4] Similarly, the SAB concluded that "[w]hile bioaccumulation data can be useful for site-specific assessment of risk, bioaccumulation metrics such as BCF/BAF measures can be problematic for assessing generic metals hazard ranking." *Id*. Ecology's Draft PBT Rule relies on the use of both persistence and BCF/BAF metrics -- and the SAB has specifically called each of these approaches into question as a matter of science when used for metals. Expert issue papers that EPA commissioned in 2004 to examine the scientific considerations relating to hazard assessment of metals only reinforce the

[1] Letter from Tom Fitzsimmons, Director, Department of Ecology, to Greg Hanon, March 5, 2002 (copy attached).

[2] See EPA, "Priority Chemicals and Fact Sheets," http://www.epa.gov/epaoswer/hazwaste/minimize/chemlist.htm (last viewed 7/20/05).

[3] *Id*.

[4] See EPA-SAB-EC-LTR-03-001 Review of Metals Action Plan: An EPA Science Advisory Report, at 5.

scientific concerns identified by the SAB's 2002 report regarding attempts to apply PBT criteria to metals.[5]

For all the foregoing reasons, NAMC urges Ecology to remove any reference to metals from its Draft PBT Rule.

Respectfully submitted,

William J. Adams, Chairman
North American Metals Council

Attachment

[5] See http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=86119.